

Application No.: 10/556,457
Amendment dated: March 17, 2009
Reply to Office Action of December 24, 2008
Attorney Docket No.: 21295.0119US1

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Amendments to the Specification

An Abstract of the Disclosure is presented on a separate sheet in an attachment to this Amendment.

Please replace paragraph [0031] with the following amended paragraph:

[0031] ~~FIG. 4~~ Figs. 4a and 4b the principle behind tipping of the carrier element[[:]];

Please replace paragraphs [0035]-[0038] with the following amended paragraph:

[0035] The tilt of the objective 7 can be adjusted by a relative rotation between the carrier element 3 and the guide element 9, which is described in detail below in ~~FIG. 4~~ Figs. 4a and 4b.

[0036] The guide element 9 can be guided into and rotated in the round recess of a further ~~rotational axis~~ guide element 13. The recess of the further guide element 13 is eccentric relative to the further rotational axis (with an offset to the additional axis) so that the guide element 9 together with the carrier element 3 and the objective 7 can be tilted along an orbit determined by the eccentricity.

[0037] The further guide element 13 can be rotated around another rotational axis that is parallel to the further rotational axis when guided in the round, eccentric recess of a ~~further other~~ guide element 15. The eccentricity of the recess of the other guide element 15 is larger than that of the further guide element 13. By combining the rotations of the further guide element 13 and the other guide element 15 in a suitable manner one can transfer precisely within a plane that is perpendicular to the other rotational axis.

[0038] The other guide element 15 is rotatably fitted in an external guide element 17. This exhibits an external screw thread 19 that enables transfer of the object—including the

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carrier element 3 and the guide elements ~~[[917]]~~ 9, 13, 15, and 17 in the direction of the further rotational axis. The external guide element 17 is arranged with the screw thread 19 in the holding element 21. A cage 25 attached to the external guide element 17 surrounds the carrier element 3 (with an element 23) and guide elements ~~[[9-17]]~~ 9, 13, 15, and 17 and keeps the elements together with the ball-head shaped hold-down device.

Please replace paragraph [0041] with the following amended paragraph:

[0041] FIG. 2 shows an exploded view of the fine tuning device 1 according to the invention. The carrier element 3 and guide elements ~~[[9-17]]~~ 9, 13, 15, and 17 exhibit bore holes 27 into which a control lever can be inserted.

Please replace paragraphs [0043]-[0044] with the following amended paragraph:

[0043] ~~FIG. 4~~ Figs. 4a and 4b illustrates the principle of tipping of the carrier element 3 by a relative rotation between the carrier element 3 and the guide element 9. The rotational axis 31 describes the guide plane 29 at an angle other than 90°. FIG. 4a shows the base position, while FIG. 4b represents a tipped position at an angle α . The entrance pupil 33 of the objective is preferably positioned at the point of passage of the rotational axis 31 through the guide plane 29.

[0044] FIG. 5 illustrates the principle of transfer with the carrier element 3 and the guide element 9. The objective attached to the carrier element 3 that is offset to the rotational axis--that is, eccentric--describes an orbit ~~[[35]]~~ within the guide element with a radius that corresponds to the offset when the carrier element is rotated. The carrier element 3 can be rotated eccentrically together with the guide element 9, and therefore the objective 7 describes another orbit ~~37, 38~~, whereby the radius of the other orbit ~~37, 38~~ is dependent on the rotational position of the carrier element 3. The objective can be transported with a high degree of precision to any arbitrary place within the circular surface area of the other

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orbit ~~37~~, 38. For clarity, only the entrance pupil 33 for various adjustments is marked. The distance between the entrance pupil 33 and the base position 39 the theoretical optical axis of the microscope--is designated by r . The position of the direction of the distance vector is designated by β .

Attachment: Abstract of the Disclosure